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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/567,597	02/03/2006	Albrecht Rosenfeld	LE/se 030088US	8599

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EXAMINER	
BOEHLER, ANNE MARIE M	

ART UNIT	PAPER NUMBER
3611	

MAIL DATE	DELIVERY MODE
10/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/567,597

Applicant(s)

ROSENFELD ET AL.

Examiner

Anne Marie M. Boehler

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 14-26 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date April 04, 2006.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

1. Claim 24 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 24, line 2, "piston rod" should be –piston because, in each of the illustrated embodiments, fluid acts against the piston, not the rod ends.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 14-17, 20, 24, and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by DE 4130989 to Linde et al.

Linde shows a steering system with a housing 12, rack 3 that meshes with a pinion 2, and a hydraulic servo-drive 13. The servo-drive includes a piston 15, piston rod 16 and cylinder 14. The rack is fixed to the piston rod at 20 and extends parallel to it in spaced relation.

4. Claims 14 and 18-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Rosell (USPN 4,629,026).

Rosell shows a steering mechanism with a rack 30 meshing with a pinion 20 and a hydraulic servo-drive. The servo includes a rod 14, a piston 16 and a cylinder 50. The rack is fixed to the cylinder body such that the rack and piston rod are parallel and spaced from each other. Center take-off tie rods 61 are mounted to a central portion of the cylinder at 63.

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5. Claims 14, 15, 20, 24, and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Buchan (GB 2,328,191).

Buchan shows a steering mechanism with a rack 12 and pinion, and a hydraulic power assist unit 20 including a piston rod 18 connected to tie rods 24, 26 at reach end. The piston rod is fixed to the rack bar 12 so that the two bars are parallel and spaced from each other.

6. Claims 14-17 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Wilder.

Wilder shows a power steering arrangement with a rack 14 and pinion 7, and a hydraulic actuator 13 for power assist. The rack 4 and piston rod of the actuator are parallel and spaced from each other and are connected at 18. An additional rod 22 is also parallel to the rack and piston rods.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Linde in view of Ozeki (USPN 6,039,334).

Linde fails to show sleeves encasing both ends of the rack (although a sleeve does encase one rack end).

Ozeki shows a rack and pinion steering mechanism with a rack 10 and sleeves 62, 64, encasing each end of the rack.

It would have been obvious to one of ordinary skill in the art to provide the Linde mechanism with sleeves encasing each end of the rack, as taught by Ozeki, in order to protect the rack from dirt and damage.

9. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rosell in view of Ozeki.

Rosell lacks an added guide rod.

Ozeki teaches the use of an added guide rod³⁶ in order to reduce noise in the mechanism (as discussed in col. 1 of Ozeki).

It would have been obvious to one of ordinary skill in the art to provide the Rosell mechanism with an additional guide rod, as taught by Ozeki, in order to reduce noise in the system.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Bishop, Cole, Klais, Presley, and Adams show power steering systems where the rack axis is parallel to and spaced from the actuator piston rod.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anne Marie M. Boehler whose telephone number is 571-272-6641. The examiner can normally be reached on 7:30-5:00, Monday-Thursday, and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lesley Morris can be reached on 571-272-6612. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

amb 9/28/07

Anne Marie M. Boehler
Primary Examiner
Art Unit 3611

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